

5_UXÅa]U] #Hi Xca 1bncg H1E[nU 1g# 'gnQ Y[



H1E[nU 1g# 'gnQ Y[! '9[mYhÅfÅg

bÅa Yh

; fi bXgÅm]W'g]a a Y]W'XYa 'ni žk Y]''''
J U U_] 'a 1g'bÅnYhÅj Y j U Ĩ 1žU 1bcgY[mYhÅfÅg

fca 1b

ªb`[b]] 'a Uf] 'g bhXYUWdfX'W''''XYcUFYW''''

⇒W V]b'g\Λf' [YbY] [hžXYa 'ni ni g]a a Ybžk Y]''''

J U U_] 'a 1g'bÅnYhÅj Y j U Ĩ 1žU 1bcgY[mYhÅfÅg

7]bYj UYgY'XYUWdfX'W''''XYcUFYW''''

GY]bY#\Λf'G]W'k Y]gY]ghbUW]j c`n]Y\UUF'

5 a]_cf'\]gnYž\c[m]j U U_] 'bÅnYhÅj U Ĩ gžXY'bYa 'ÅfYgn] Y Y Y[mYhÅfÅg ÅfÅ_VYb

ªb Y Y['di bVd `gš' 'XYj YXYFY''

⇒W'g]a a Yj Ò`]['ni žXUgg''''

5 a]_cf'Y' Yg'a ÅfÅ_VYb Y[mYhÅfYgn] U U_] 'bÅnYhÅj Y

Gi bhÈb'hcU]hU'Y'XYUWdfX'VÈ''''

⇒W i bhYfgdcmY' [Åbn]W'X]Y'A Y]bi b[žXUgg''''

5 a]_cf'Y' Yg'a ÅfÅ_VYb Y[mYhÅfYgn] U U_] 'bÅnYhÅj Y

ªa VfU]gn'W'VÈ Xi fB]XYUWdfX'VÈZcfa 'VÈFY]U''''

H1E[nU 1g# 'gnQ Y[! '9[mYhbYa 'ÅfÅg

bÅa Yh

; fi bXgÅm]W'g]a a Y]W'XYa 'b]W'hni žk Y]''''

š 'hU 1bcgY[mYhbYa 'ÅfÅg] U U_] 'bÅnYhÅj Y

fca 1b

ªb`[b]] 'a Uf] 'XYnUdfcV'W'YU]fa UY'XY''''XYcUFYW''''

⇒W V]b'g\Λf' [YbY] [hžXYa 'ni 'k]XYfgdfW'Ybžk Y]''''

š 'hU 1bcgY[mYhbYa 'ÅfÅg] U U_] 'bÅnYhÅj Y

HYbX]b U [YbYfU B'YgY'XY'U'bi 'Z] 'XYUWdfX'W''''XYcUFYW''''

8]Y'G]W'k Y]gY]ghbUW]j c`n]Y\UUFžfcmXYa 'V]b

]W'_ca d'YhU bXYfYf'A Y]bi b["

5 a]_cf'ÅfYX]j U U_] 'bÅnYhÅj XY'Y[m]žU 1b'bYa 'ÅfYgn] Y Y Y[mYh

ªb Y Y['di bVd `gš' 'XYj YXYFYÈgšÈ'XYnUdfcVÈb

hU]hU''

⇒W k]XYfgdfW'Y'XYf'5 i ggU [YžXUgg''''bUW\U]h["

5 Vgnc`ČhY[mYhbYa 'ÅfÅg] U U_] 'bÅnYhÅj Y

8 YnUdfcV'hU'U]fa U]UWdfX'VÈZcfa 'VÈFY]U''''

⇒W `Y\ bY'X]Y' ⇒XY'Yb]W]YXYb'UžXUgg''''

5 Vgnc`ČhY[mYhbYa 'ÅfÅg] U U_] 'bÅnYhÅj Y

A B'cdi b'hU]XY] WdfX'VÈZcfa 'VÈFY]U''''

H1E[nU 1g# 'gnQ Y[! '2 ggn\Ugcb`È1gç_

bÅa Yh

fca 1b

5_UXÅa]U] #Hi Xca 1bncg H1Æ[nU 1g# 'gnQ Y[



""i bX ""i Å\by b# bhfgWY]XYb'g]W \]bg]W]h]W "" ""]""dfYn]bhB'gja]Uf]hB]#X]ZfYb Y'Eb'WUW'df]j Y H' ""
BYa \]j Uu]cg'a I'X'ÅhXc'c['_OnQh]' \Ugcb'İ g]½c_ 'Åg_Ø'ObVgÅ[Y_ 'a Y[½'UdE'1g]1U

-a 'I bhfgW]YX'ni ""k Y]g' ""u Z' "" GdfY'XYcgW]fY'XY' ""Z' ""g'Xcj YXY H'V' ""
5a]_cf'_ÅhXc'c['_OnQh]'_Ø'ObVgÅ[Yb'j Ub'U' \Ub[gÖ'm

-a ; Y[YbgUm'ni ""]g#g]bX' "" ""'Eb'cdcn]]YW' ""YgY#g bh' ""
5a]_cf'_ÅhXc'c['_OnQh]'_Ø'ObVgÅ[Yb'j Ub'U' \Ub[gÖ'm

"" Å\by h' "" \]bg]W]h]W "" "" YgY'gja]Uf' W' ""'Eb'WUW'df]j Y H' ""
' ÅhXc'c['_OnQh]' \Ugcb'İ g]½c_] \Ub[gÖ'mn]1g]_cf' Åg'a U[nUf'1Uu]_cf' \Ugnb'1LbX'İ

""i bX ""i bhfgWY]XYb'g]W]a <]bV']W_ 'U Z' "" ""]""X]ZfB'Eb'WUW'df]j Y H' ""
' ÅhXc'c['_OnQh]' \Ugcb'İ g]½c_] \Ub[gÖ'mn]1g]_cf' Åg'a U[nUf'1Uu]_cf' \Ugnb'1LbX'İ

8 Yf'YfgY' ""Zk Å\fybX']a ; Y[YbgUm'XUhi 'XYf nk Y]H' "" Df]a i ' #df]a U' ""ZgdfY'XYcgW]fY'XY'UWgU#UWUg]UZW 'XY!
U'Xc]YU#MU'XY!U'Xci U' ""
5a]_cf'_ÅhXc'c['_OnQh]'_Ø'ObVgÅ[Yb'j Ub'U' \Ub[gÖ'm

9]bY'XYf'k YgYbh]WYb I bUX]bhfY'df]bV]dUY'Y'gja]Uf]hB]#X]ZfYb Y
Y' \b']W_]H'b# YfgW]YXYb\Y]H'b'nk]gWYb' ""i bX
""]g' "" EbfY' ""]""YgY'V' ""
5a]_cf'_ÅhXc'c['_OnQh]' \Ugcb'İ g]½c_ U]j U[m]Qgn\Ugcb' E'1g]_c_ U]1/2'UdE'İ b_ 'a Y[

9]b' [fc>Yf'I bhfgW]YX'nk]gWYb' ""i bX' ""]gžXUgg I bUX]bhfY'X]ZfYb Y'Y'Eb'fY' ""]""YgY'V' ""ZgdfY'XYcgW]fY'
""Zk Å\fybX' "" XY' ""
5a]_cf'_]Ya Y'Øb_] [m_Ø'ObVgÅ[Yh_ÅhXc'c['_OnQh]' \YhY[m\cgg'Ö']gU'Uh'Y'hÅf'ÅgY_f`

H1Æ[nU 1g# 'gnQ Y[' ! J ÅYa ÅbnY_ bÅa Yh

fca 1b

-W'k ØfXY'gU] YbžXUgg' ""

5 'di H'U'gdi bY'V' ""

5a]_cf'_c'ntub'j ÅYa Åbn]hbm'] 1b'ÉUgn'_]ž'La]j Y' _UdVg'c'U'U'Ub'bYa 'j U[m]h'Y'Y'g'a Åf'Å_Yb' \U]h'cnc]h

9g'gWY]bhia]fžXUgg' ""

-a dfYg]U'a YU'YgY'V' ""

5a]_cf'_c'ntub'j ÅYa Åbn]hbm'] 1b'ÉUgn'_]ž'La]j Y' _UdVg'c'U'U'Ub'bYa 'j U[m]h'Y'Y'g'a Åf'Å_Yb' \U]h'cnc]h

A Y]bYf'A Y]bi b['bUW' ""

8i dB'dB'fYfYU'a YU' ""

GnYa Å'nYg] ÅYa Åbn]_]bn']j 1b'É'1g]_cf'

5_UXÅa]U] #Hi Xca 1bncg H1E[nU 1g# 'gnQ Y[



J cb'a Y]bYa 'GhUbXdi b_hU g''''
GnYa Å`nYgj Å`Ya Åbmi_]bn]j 1bE1gU_cf

8]b'di bVM `a Yi `XYj YXYFY''''

=\ V]b`XYf`5 bg]VhžXUgg''''
GnYa Å`nYgj Å`Ya Åbmi_]bn]j 1bE1gU_cf

Gi bhXY`dBFYFYVb''''

A Y]bYf`A Y]bi b[`bUW`[]VhYgY]bYF Y]\Yj cb
; fØbXYb" `9fgYbg'''''' Nk Y]Hbg''''
5a]_cf`gn1a cgÅfj Yhigcfc`i b_`ZY`j ULa]`a Y`Yth

7 cbg]XYf`Vb`Yi]gB'a chj YX]j YfgY''ab`df]a i `f3bX''''zEb
W`XY!U`Xc]`YUf3bX''''

9g]gia Y]bY` , VYfnYi [i b[žXUgg'''''' žk Y]''''
GnYa Å`nYgj Å`Ya ÅbmiÅg]LbbU_`a U[nUf1bU_U_cf`\Ugnb1zUbXl

7 cbj]b[YfYU`a YU`YgY`Vb''''''XYcUfYW''''

H1E[nU 1g# 'gnQ Y[!`2 ggnY_`Ch `YYa Y_ bÅa Yh

@UggYb`G]Y`i bg`bi b''''
UbU`ng]YfYb#`ni k YbXYb#`bhYfg V\Yb''''
5a]_cf`hÅa 1b] 1zUgn`Åg`Ö`VY`YnXÅgi`YnXYgn

fca 1b
GB`LbU]nBa `UW`a #bY`EbhcUfW`a `U#1 Ua]bBa ''''

9g]gY\`hibi b`ZYgžXUgg'''''''' Bi b`f]VhYb`k]f`i bgYf
5i [Yba Yf_`U`Z''''
5a]_cf`hÅa 1b] 1zUgn`Åg`Ö`VY`YnXÅgi`YnXYgn

5a `VUf]Z]VhZLdhi `Vb''''''''5W`a]g`bY`EbhfYdH`Ba `U`Yb]U
Lj`dfU''''

, VYfX]Yg`XUfZ]Y]b`5 f[i a YbhXU[Y[Yb`b]Vh
ØVYf[Ub[Yb`k YfXYb. ''''
5a]_cf`_]Y[ÅgnEh`]bZcfa 1b] hUxgn`Y[ma 1E`ZY`ÅdEYthÅfj Y`Åg\Yn

A U]`a i `hXYW`hU`hzi b`Uf[i a YohEa`dch]j U`UW`gi]
`i`Vb`bi`dcU`Y`Z]]b`cfU`h''''

Ni [Y[YWYbYfa U`Yb'''''' žUWYf''''
5a]_cf`Yb[YXgn`Lh`Y`YbÅfj bY_žXY`gnYfYthÅ``rcj 1bV]`gU`Yb`1Y` Uj`Urc`LhiYbb]

5Xa]hYa`ZLdhi `Vb''''''žXUf''''

Nk Uf`hf]Zn''''''ni žXYbbcV\`V`Y]VhX]Y`HUg]UWY
VYgY\`YbžXUgg''''
5a]_cf`Yb[YXgn`Lh`Y`YbÅfj bY_žXY`gnYfYthÅ``rcj 1bV]`gU`Yb`1Y` Uj`Urc`LhiYbb]

9gY`UXY`BfU`hVb''''''žXUf`W`hcU`Y`UW`gYU`dfcV`Ya`U
fBa`3bY`ZLdhi `Vb''''

Ni [Y[YWYbž''''''žb]VhYgY`hcfcm''''
5a]_cf`Yb[YXgn`Lh`Y`YbÅfj bY_žXY`gnYfYthÅ``rcj 1bV]`gU`Yb`1Y` Uj`Urc`LhiYbb]

GY`UXa]hY`ZLdhi `Vb''''''žEbg''''

5_UXÅa]U] #Hi Xca 1bncg H1E[nU 1g# 'gnQ Y[



æ ; Y[YbhY]`''''

8]b`VbhfBZ''''

HÅj Yg'a Y[[m n XÅg_] 'Yj È1gU_cf` \Ugnb12UbXí ža]i Hb`Uh`UXchia Y[[m n XÅg'a Y[12UdÈ1gU_YfØh

9]bYfgY]hg''''

DY'XY'c'dUfHY''''

5 n'Åfj Y'ÅgY[m]_c`XU 1bU`_Wa i HU1gU_cf

5bXYfYfgY]hg''''

DY'XY'U'fB'dUfHY''''

5 n'Åfj Y'Åg'a 1g]_c`XU 1bU`_Wa i HU1gU_cf"A]bX][`U" a 1g'Ågnh' i Hb` \Ugnb12UbXí

Hfcm''''

7cbhfUf''''

5 a]_cf`Y[mV]ncbmcgUXUHU`j U[mia Y[[m n XÅggY`Y`YbhÅH'g'Åfj Yh\cni b_`ZY

I b[YUWXhYhXYf`HUhgUWYž`XUgg''''

ab`V] XU`Zbhi`i]Vf''''

5 a]_cf`Y[mV]ncbmcgUXUHU`j U[mia Y[[m n XÅggY`Y`YbhÅH'g'Åfj Yh\cni b_`ZY

K]ggYbgWUZh]W.#<]gcf]gW` [YgY`Yb''''

8]b`di bW'XYj YXYfY` h]b]ZV]gcf]W''

5 a]_cf`h' Xca 1bncgj U[mia ÖHY`]HfÅbY'a] YgYa ÅbmY_fY'i HU'i b_

æ ; Vf][Yb''''

ab'h'a d'f'cf''''

5 a]_cf`Y[m_]Y[ÅgnÈÅg` \cnn12X\UhUh`Y`Ya n'ÅgY\Yn

8UfØYf`\]bu`g''''

A U]`a i`hXW'W'U'h''''

5 a]_cf`Uh`UXchih'Åa 1a 1E'a Å`nYb`_]Y`Ya YnhYX